

INCH POUND

MIL-DTL-83413/6B  
24 November 2003  
SUPERSEDING  
MIL-C-83413/6A  
27 December 1993

## DETAIL SPECIFICATION SHEET

### CONNECTORS AND ASSEMBLIES, ELECTRICAL, AIRCRAFT GROUNDING: RECEPTACLES, TWO PIECE, WITH INSERTS AND HOUSINGS

This specification is approved for used by all Departments and Agencies of the Department of Defense.

The requirements for acquiring the product described herein shall consist of this specification sheet and MIL-C-83413.

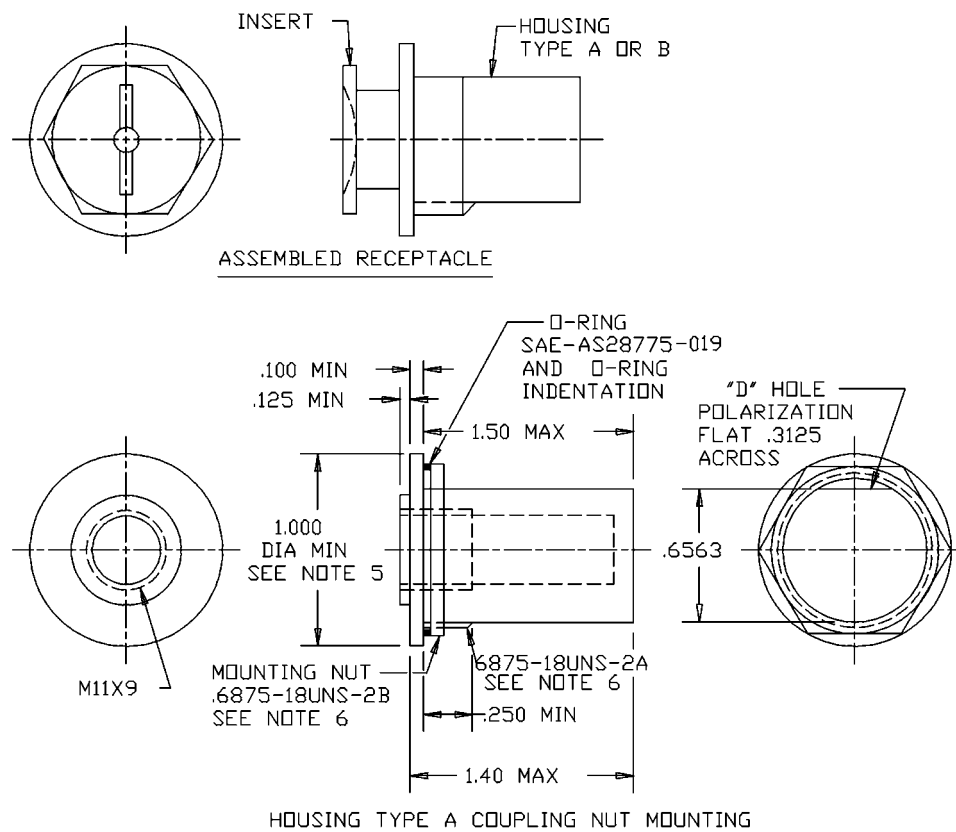
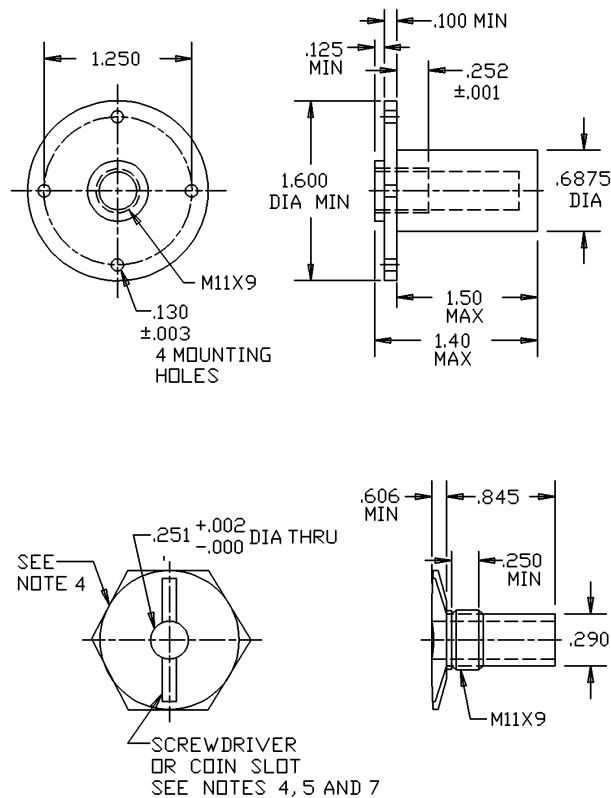


FIGURE 1. Grounding receptacle.

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Inches	mm	Inches	mm
.002	0.05	.290	7.37
.003	0.08	.3125	7.94
.060	1.52	.6563	16.67
.100	2.54	.6875	17.46
.125	3.18	.845	21.46
.130	3.30	1.250	25.40
.250	6.35	1.40	35.60
.251	6.37	1.50	38.10
.252	6.40	1.600	40.64

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Unless otherwise specified, tolerance is  $\pm .005$  (0.13 mm) for three place decimals and  $\pm .0010$  (0.025 mm) for four places decimals.
4. When hex flanges are used on inserts, the hex shall be .750 (19.05 mm) for opposite flats and .438 inch (11.13 mm) across the flats. Circularly flanged inserts shall be turnable by a standard screwdriver. Hex flanged inserts shall be turnable by means of a coin.
5. Housing flanges need not be circular, however, the surface area of the flange shall be at least of the minimum size shown.
6. M16 X 1.0 metric threads may be used as an option. .6875-24 UNEF-28 threads may be used as an option; mounting nut then shall be MS3186-36.
7. Changes in the bore dimensions will result in international interoperability problems.
8. Coins slot width .073 inch (1.85 mm) minimum.
9. .068 inch (1.73 mm) is minimum depth measure to theoretical intersection of the arc with the horizontal centerline.
10. Housing may be welded or brazed.
11. Insert/housing threads (unless otherwise specified) are metric.

FIGURE 1. Grounding receptacle - Continued.

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REQUIREMENTS:

Material:

Inserts: Brass in accordance with ASTM-B36 and ASTM-B121.

Insert detents: Beryllium copper in accordance with ASTM-B196, ASTM-B197 and ASTM-B194.

Housing: Stainless steel in accordance with SAE-AMS-S-7720, 300 series composition, condition A, passivated in accordance with ASTM-A967 or SAE-AMS-QQ-P-35.

Finish: Cadmium plate in accordance with SAE-QQ-P-416, type II, class 2, or aluminum coating, plating, or zinc in accordance with ASTM-B633.

Contact resistance: Shall not exceed 5.0 milliohms.

Durability: 3,000 cycles.

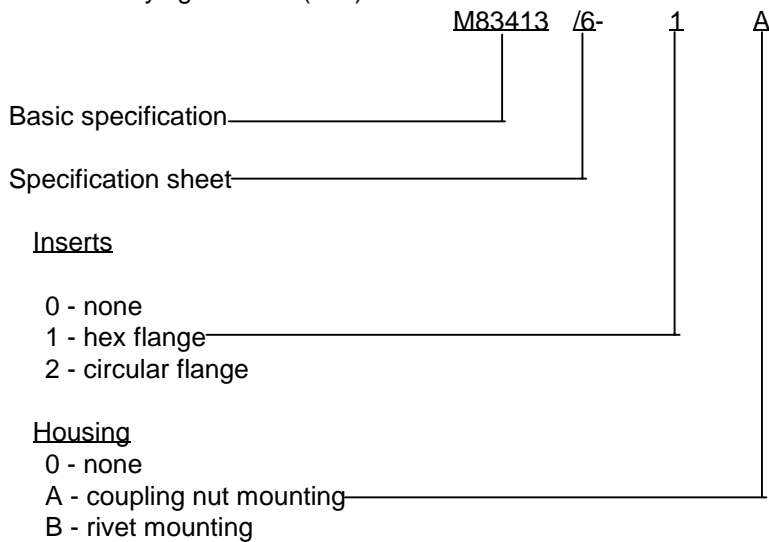
O-rings: Shall be supplied with housing type A.

Mounting nut: Shall be supplied with housing type A.

Fluid immersion: Not applicable to housing type B.

Mating plug: In accordance with MIL-C-83413/4.

Part or Identifying Number (PIN):



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### QUALIFICATION:

Qualification is not required for this specification sheet. First article inspection shall be a visual and mechanical inspection in accordance with MIL-C-83413.

Certain provisions of this specification are the subject of International Standardization Agreements ASCC AIR STD 25-26 and NATO STANAG 3632. When revision or cancellation of this specification is proposed which will affect or violate the international agreements concerned, the preparing activity will take appropriate reconciliation action through international standardization channels, including departmental standardization offices, if required.

Changes from previous issue. Marginal notations are not used in this revision to identify changes with respect to previous issue due to the extent of the changes.

Referenced documents. In addition to MIL-C-83413, this document references the following:

MS3186	SAE-AS28775
ASTM-A967	SAE-AMS-S-7720
ASTM-B36	SAE-AMS-QQ-P-35
ASTM-B121	SAE-QQ-P-416
ASTM-B194	ASCC-AIR STD 25-26
ASTM-B196	NATO STANAG 3632
ASTM-B197	
ASTM-B633	

### CONCLUDING MATERIAL

#### Custodians:

Army - AV  
Navy - AS  
Air Force - 11  
DLA - CC

#### Preparing activity:

DLA - CC

(Project 5935-4417-001)

#### Review activities:

Army - AR, CR, CR4, MI  
Navy - MC  
Air Force - 02, 13, 18, 82, 99

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at [www.dodssp.daps.mil](http://www.dodssp.daps.mil).